IN THE CLAIMS

Delete claims 3-5.

Please add new claims 6-25.

6. An article of manufacture, made by a method for determining the effectiveness of a therapy by identifying changes in a biological indicator of a patient undergoing the therapy, wherein the improvement comprises, the utilized method quantitates the biological indicator by analyzing array output patterns generated from biological samples taken at different times from the patient and applies quantum resonance interferometry to the array output patterns.

7. The article of manufacture of claim 6 wherein the biological indicator is viral load.

8. A computer system for determining the effect of one or more therapies upon a subject comprising a processor and a memory coupled to said processor, said memory encoding one or more programs, said one or more programs causing said processor to perform the following steps:

generating a viral diffusion curve based on known viral load studies associated with the therapy of interest;

calibrating the viral diffusion curve based on at least two viral load measurements;

mapping each of the output patterns representative of hybridization activity to respective coordinates; and

determining the viral load by interpreting the coordinates of the calibrated viral diffusion curve.

9. A technique for quantitating viral load, if any, within a biological sample applied to an array detector output generated from an array, wherein the improvement comprises,

utilizing quantum resonance interferometry to analyze the array detector output to determine the presence of viral load on the array.

10. The technique of claim 9 wherein quantum resonance interferometry is utilized to construct a calibrated viral diffusion curve.

11. The technique of claim 9 wherein said quantum resonance interferometry induces resonances based on interference between a quantum expressor function and spectral characteristics of the array detector output and detects resonances, if any, at each element in the array detector output.

12. The technique of claim 11 wherein the step of inducing a resonance pattern includes the step of iteratively processing the array detector output by performing a convergent reverberation to yield a resonance pattern representative of resonances between a predetermined set of selected quantum expressor functions and the output pattern until a predetermined degree of convergence is achieved between the resonances found in the resonance pattern and resonances expected the spectral characteristics of the array detector output.

13. A technique for determining viral load within a patient based on output patterns from an arrayed information structure, wherein the improvement comprises, using active signal processing on the output patterns to determine the presence, if any, of viral load indicators.

14. The technique of claim 13 wherein the active signal processing comprises the steps of:

inducing resonances based on intereference between an expressor function and spectral characteristics of the output patterns from the arrayed information structure; and

detecting the resonances, if any, at each element in the output patterns from the arrayed information structure.

15. The technique of claim 14 wherein the active signal processing further includes the step tessellating the output patterns from the arrayed information structure prior to the induction of resonances.

16. The technique of claim 14 wherein the step for inducing resonances includes the method selected from a group consisting of interferometry, addition, linear and nonlinear scaling, multiplication, and convolution.

17. The technique of claim 13 wherein the arrayed information structure embodies measurements from a group consisting of intensity, amplitude, and phase.

18. The technique of claim 14 wherein the expressor function is a quantum expressor function.

19. The technique of claim 14 wherein the expressor function is a stochastic expressor function.

20. The technique of claim 14 wherein the spectral characteristics are selected from a group consisting of noise, signal, or noise coupled to signal.